

REMARKS

In the Office Action, the Examiner rejects all pending claims, Claims 1-23 and 63. Applicant thanks the Examiner with appreciation for the careful consideration and examination. No new matter is believed introduced by this submission.

Applicant files this response solely to facilitate prosecution. Applicant reserves the right to pursue claims of broader or similar scope as originally filed in this application, a continuation application, or other application after allowance of the present application. Applicant does not concede that the current or past rejections are correct and reserves the right to challenge such rejections later in prosecution, on appeal, or at some other time. Any argument, amendment, or claim cancellation is not to be construed as abandonment or disclaimer of subject matter.

After entry of this Response, Claims 1-23 and 63 remain pending. Applicant believes the claims are in allowable condition and respectfully request reconsideration of the claims in light of the following remarks.

I. Please Hold Provisional Double Patenting Rejection in Abeyance

The Examiner issued a provisional double patenting rejection based on co-pending US App. No. 10/794,918. Applicant requests the Examiner to hold the provisional rejection in abeyance for later consideration. If necessary, Applicant may later file a terminal disclaimer.

II. Claim 19 Is Definite In Line With 35 U.S.C. § 112

The Examiner alleges that Claim 19 is not definite since the means elements are “modified by some structure, material, or acts recited in the claim.” Yet the Examiner does not specify which parts of the claim “modifies” the means elements. As currently worded, Applicant believes that Claim 19 is a means plus function claim that expresses means for performing the specified functions without reciting structure in line with § 112, ¶ 6. As to the Examiner’s assertion that the specification fails to describe the claimed means elements, Applicant directs the Examiner’s attention to Figures 4 and 5 and corresponding specification text. At least these portions of the application provide ample description for those of skill in the art. Based on these reasons, Applicant believes that Claim 19 is proper and respectfully requests the Examiner to withdraw the rejection.

III. Claims 1-23 and 63 Are Patentable Under 35 U.S.C. § 103

The Examiner rejects Claims 1-23 and 63 allegedly unpatentable under § 103 due to a combination of Wallace (USPN 6,473,467) and Trikkonen (US 2004/0002364). Applicant respectfully traverses the rejection because the Examiner has not set forth a prima facie case of obviousness for a number of reasons.

The Examiner bears the initial burden of establishing a prima facie case of obviousness. MPEP § 2141. Establishing a prima facie case of obviousness begins with resolving the factual inquiries of *Graham v. John Deere Co.*, 383 U.S. 1 (1966): (A) determining the scope and content of the prior art; (B) ascertaining the differences between the claimed invention and the prior art; (C) resolving the level of ordinary skill in the art; and (D) considering any objective indicia of nonobviousness. After resolving the *Graham* inquiries, the Examiner must determine whether the claimed invention would have been obvious to one of ordinary skill in the art.

When determining whether a claim is obvious, an examiner must make “a searching comparison of the claimed invention – *including all its limitations* – with the teaching of the prior art.” *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, “obviousness requires a suggestion of all limitations in a claim.” *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003). Moreover, as the Supreme Court recently stated, “*there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*” *KSR Intl. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007).

Here, Applicant respectfully submits that the Examiner has not properly characterized the teachings of Wallace and Trikkonen and, as a result, has failed to properly determine the scope and content of the references and ascertain differences between the claims and the applied combination. Accordingly, a prima facie case of obviousness has not been established.

To largely support the current claim rejections, the Examiner applies the § 103 combination of Wallace and Trikkonen. Wallace is newly cited and it is believed that the Examiner has applied Trikkonen in a different manner from previous prosecution. Applicant respectfully traverses the rejection since the applied combination does not support a prima facie case of obviousness.

With respect to Trikkonen, this reference does not teach or fairly suggest Claim 1’s feature of “performing spatial processing on at least one of the pilot and data symbols for each subband with at least one steering vector selected for the subband, the spatial processing

randomizing a plurality of effective single-input single-output (SISO) channels observed across the plurality of subbands” as the Examiner asserts. The Examiner cites to Trikkonen’s Paragraphs 141-155 as allegedly teaching this feature but these paragraphs fail to teach or suggest the claimed features. Trikkonen discusses a concept called “randomising,” (Paragraph 141) yet these paragraphs in Trikkonen do not discuss or fairly suggest “spatial processing randomizing a plurality of effective single-input single-output (SISO) channels observed across the plurality of subbands” as claimed. Instead, Trikkonen’s utilizes “extra transmit capacity [] to make the communication channel more ergodic.” (*Id.*).

Further the applied combination does not fairly suggest to perform the claimed spatial processing features for each subband with at least one steering vector selected for the subband as claimed. Indeed, as discussed in Trikkonen’s paragraphs 134-135, instead of spatially processing at least on the pilot and data symbols for each subband and randomizing a plurality of effective SISO channels observed across the plurality of subbands having the pilot and data symbols, Trikkonen’s system randomizes additional beams that are transmitted using unused transmit resources.

Applicant also asserts that the applied reference combination is improper for additional reasons. In the Office Action, Applicant believes the Examiner fails to provide any adequate reason for combining Wallace and Trikkonen. When discussing the combination, the Examiner asserts that “it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Wallace as taught by Trikkonen, since Trikkonen stated that various systems.” (See 18 October 2010 Office Action, pp. 9, 10, 12, and 13). It appears that the Examiner may have inadvertently not provided a complete reasoning for the combination. This prevents Applicant from understanding and responding to the Examiner’s rejection. When reviewing this submission, Applicant respectfully requests the Examiner to telephone the undersigned to discuss the combination. Based on the current record, Applicant maintains that the Examiner has not set forth sufficient reasons for the combination. In light of this, Applicant believes the Examiner has not satisfied *KSR*’s requirement that Examiners must provide some reasoning to properly support a claim rejection based on a combination.

For at least the above reasons, Applicant believes that all claims are allowable. Indeed, the other pending independent claims recite features similar to those discussed above regarding

Claim 1, and as a result, all of the pending independent and dependent claims are believed allowable. Withdrawal of the claim rejections is respectfully requested.

IV. Fees & December 2010 IDS Submission

Applicant files this Response with three months of the Office Action and with no new claims. Thus, no claims fees are believed due.

In December 2010, Applicant submitted an IDS. Applicant respectfully requests the Examiner to review the IDS submission and to indicate review by initialing the filed IDS forms. To the extent any fees are due to ensure review of this IDS, the USPTO is authorized to charge fees to Deposit Account 17-0026.

No other fees are believed due. But the USPTO can charge any fees deemed due to Deposit Account 17-0026 for full acceptance of this paper and to keep this application pending.

V. Conclusion

This Response is believed to be a complete response to the Office Action. Applicant respectfully asserts that the pending claims are in condition for allowance and respectfully requests passing of this case in due course of USPTO business.

If the Examiner believes that any issues associated with the Application can be resolved over the phone or by Examiner's amendment, a telephone call to Hunter Yancey at 858-845-7534 is respectfully requested.

Respectfully submitted,

QUALCOMM, INC.

/jameshuntancyjr53809/
James H. "Hunter" Yancey, Jr.
USPTO Reg. No. 53,809

QUALCOMM Patent Group
5775 Morehouse Drive
San Diego, CA 92121
P: 858-845-7534
F: 858-845-3986
E: hunter@qualcomm.com
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